CALIFORNIA ENVIRONMENTAL QUALITY ACT

INITIAL STUDY

SOUTHERN CALIFORNIA EDISON COMPANY
SAN ONOFRE NUCLEAR GENERATING STATION
HAZARDOUS WASTE FACILITY PERMIT

The Department of Toxic Substances Control (DTSC) has completed the following Initial Study for this project in accordance with the California Environmental Quality Act (§ 21000 et seq., California Public Resources Code) and implementing Guidelines (§15000 et seq., Title 14, California Code of Regulations).

I. PROJECT INFORMATION

Project Name:

Southern California Edison Company
San Onofre Nuclear Generating station
Hazardous Waste Facility Permit

Site Location:

5000 Pacific Coast Highway
San Clemente, CA
San Diego County

Contact Person/ Address/ Phone Number:

Brian Metz
5000 Pacific Coast Highway
San Clemente, CA 92762
(949) 368-6829

Project Description:

In accordance with California Health and Safety Code (H&SC), section 25200, the Department of Toxic Substances Control (DTSC) is proposing to issue a full Hazardous Waste Storage Facility Permit to Southern California Edison (SCE) authorizing the continued consolidation, storage and off-site transport of mixed waste and combined waste routinely generated from on-site sources at the San Onofre Nuclear Power Generating Station (SONGS) located off the Pacific Coast Highway near San Clemente, California (Figure 1). SCE was granted Interim Status Authorization by DTSC to operate its existing mixed waste and combined waste storage operations pursuant to H&SC section 25200.5. No modifications or changes are proposed to the existing handling and waste analysis methods currently used by SCE to manage the fourteen (14) USEPA waste

codes and thirty-one (31) California waste codes generated at SONGS. Issuance of this full permit would impose the requirements of Chapter 20, Title 22, Division 4.5, California Code of Regulations (CCR) upon facility operations conducted by SCE.

Project Activities:

If approved, the permit would authorize the following activities:

- Storage of Mixed Waste and Combined Waste at the following three units:

    1. South Yard Facility-Batch Plant (SYF-BP) Mixed Waste and Combined Waste Storage Sections A and B.

    2. Low Specific Activity Waste (LSAW) Mixed Waste and Combined Waste Storage Area

    3. High Specific Activity Waste (HSAW) Mixed Waste and Combined Waste Storage Area

- Waste characterization, profiling, and off-site transport of containerized waste via truck to a licensed, low-level radioactive waste or mixed-waste repository.

Waste volumes and types in each unit are listed in Table 1 and Table 2:

Table 1
Existing Interim Status
Mixed Waste and Combined Waste
Storage Limits to be Permitted at SONGS

Unit #	Name	Description	Types and Quantities of Containers	Waste Volume (gal)
1	Batch Plant (SYF-BP)	Fenced concrete pad. Mixed and/or Combined Waste to be stored in: Section A, and/or Section B.	800x 55-gal Drums 5x 3.5 yd^3 Boxes* 30x 30-gal Containers 30x 5-gal Containers	46,150
2	Low Specific Activity Waste (LSAW) Storage Area	Concrete structure designed to provide maximum shielding and security. Mixed waste/combined waste to be stored in southeastern corner of building.	100x 55-gal Drums 10x 3.5 yd^3 Boxes* 10x 30-gal Containers 10x 5-gal Containers	8,050
3	High Specific Activity Waste (HSAW) Storage Area	Concrete structure designed to provide maximum shielding and security. Mixed waste/combined waste to be stored in western-most area closest to interior rolling gate of the vaulted bay.	100x 55-gal Drums 10x 3.5 yd^3 Boxes* 10x 30-gal Containers 10x 5-gal Containers	8,050

Note: * The 3.5 yd^3 box represents an equivalent of 220 gallons of solidified mixed waste and combined waste.

Table 2
MIXED WASTE AND COMBINED WASTE STREAMS AT SONGS

WASTE NAME	USEPA Hazardous Waste #	California Waste Code	Hazardous Properties of the Waste	Process(es) that produced the waste
Flammable Liquid	D001, F001, F002, F003, F005, D006, D007, D008	214, 343, 551	Ignitability	Painting/laboratory
Sulfuric Acid	D002	791	Corrosivity	Water Chemistry, Resin Regeneration
Sodium Hypochlorite	D002	131	Corrosivity	Water Chemistry
Sodium Hydroxide	D002	122	Corrosivity	Water Chemistry, Resin Regeneration
Hydrazine	U133	123	Reactivity, Toxicity, Corrosivity	Water Chemistry
Ammonium Hydroxide	n/a	123	Toxicity, Corrosivity	Water Chemistry, Resin Regeneration
1,1,1-Trichloroethane	F001	551, 741	Toxicity	Painting
1,1,2-Tricloro-1,2,2-Trifuoroethane (Freon)	F002	741, 751	Toxicity	Laboratory, Freon Filters, Rags
Combustible Liquid (Oil)	n/a	221	Toxicity	Pumps, Motors, Lubricating
Asbestos	n/a	151	Toxicity	Insulation
Combustible Solid	n/a	222	Toxicity	Oil/Absorbent Rags
Corrosive Solid	D002	181, 431, 791, 792	Corrosivity	Acid/Caustic Clean-ups, Other Phosphates
Corrosive Liquid	D002	135	Corrosivity	Acid/Caustic Clean-ups, Other Acids/Caustics
Flammable Solid	D001, F001, F002, F003, F005, D006, D007, D008	352, 461	Ignitability	Painting
Sandblast Grit	n/a	181	Toxicity	Inorganic Sandblast Grit
Synthetic Oil	n/a	221	Toxicity	Pumps, Motors, Lubricating
Ethylene Glycol	n/a	135	Toxicity	Cooling Systems
Steam Generator Sludge	n/a	181	Toxicity	Steam Generator, Sludge Lancing
Oil-Tricloroethane	F001, F002	741	Toxicity	Oil Cleaning Parts, Etc.

Misc. Non RCRA Hazardous Wastes	n/a	223, 132, 214, 241, 341, 342, 343, 351, 352, 461, 491	Toxicity	Unspecified oil containing wastes, aqueous solutions w/ metals, unspecified solvent mixtures, tank bottom waste organic liquids, (non solvents) w/ halogens, organic liquids with metals, unspecified organic liquid mixtures, organic solids w/ halogens, other organic solids, paint sludge, unspecified sludge waste
Lead	D008	181	Toxicity	Lead Shielding, paint chips, computers
Mercury	D009	181, 725	Toxicity	Mercury Instruments
Aqueous Metal Containing	D005, D006, D007, D008, D009, D010, D011	181, 722, 723, 724, 725, 726, 727	Toxicity	Miscellaneous Plant Systems

NOTE: This table is for the SYF- BP Mixed Waste Area and/or the MPHF LSAW/HSAW Mixed Waste Areas. The mixed waste is placed in the areas based on radiation dose rates as the general guidance.

Background:

SONGS is a nuclear power generating facility consisting of three pressurized water nuclear reactors (Units 1, 2 and 3) and several smaller standby diesel generating units (Figure 2). Reactor Unit 1 operated from January 1, 1968 to November 30, 1992, and was shutdown in 1992. Unit 1 was rated at 450 megawatts of electrical output. Constructed in 1974 and 1976, Units 2 and 3 provide thermal energy to produce steam, that is then used to drive turbines which turn generators that produce electricity for the local power grid. Units 2 and 3 are rated to produce 1,100 megawatts, each.

The maintenance and decontamination of equipment may involve the generation of hazardous waste contaminated with radio nuclides. This waste is referred to as “mixed waste” or as “combined waste”, depending upon whether the waste is a federally-listed Resource Conservation and Recovery Act (RCRA) waste (mixed waste) or non-RCRA waste (combined waste). Waste typically generated from on-going plant operations includes such materials as asbestos, solvents and oils. The decommissioning and decontamination (D&D) of Unit 1, which started 1999, has also led to the generation of waste. The D&D activities include the dismantling, removal and shipment of plant components.

Mixed waste and combined waste storage and treatment facilities first became regulated by the U.S.EPA on March 23, 1989, under RCRA. Mixed waste is hazardous wastes that typically exhibits ignitability, corrosivity, reactivity and/or toxicity characteristics, as well as have radioactive properties. California-only hazardous waste when combined with radionuclides is referred to as Acombined waste@. Regulation of nuclear materials is

excluded from the 22 CCR and RCRA.[1] DTSC regulates the hazardous component of mixed/combined waste. DTSC does not regulate the radioactive component of the mixed/combined wastes. The Nuclear Regulatory Commission (NRC) or U.S. Department of Energy regulates the radioactive components of the mixed/combined waste. The dual nature of mixed/combined waste poses additional safety requirements.

Based upon its March 22, 1989 Part A Application submittal, SONGS qualified for interim status authorization to continue existing mixed/combined waste storage operations pursuant to H&SC section 25200.5. SONGS submitted a revised Part A on March 31, 1998. DTSC acknowledged in a letter that SONGS operated the waste storage under an interim status authorization. Subsequent modifications to the facility storage capacity of March 1989 were subject to a Consent Agreement with DTSC, signed June 16, 1999, and were subject to the requirements of section 66270.41 of Title 22, Division 4.5, CCR. SONGS submitted a revised Part A application on August 13, 1999. The modification was approved and a Negative Declaration was adopted under the State Clearing House SCH # 200091016, dated December 5, 2000.

The August 13, 1999 (as revised July 26, 2002) Part A Application lists fourteen (14) USEPA waste codes, or separate waste types and thirty-one (31) California waste codes. The mixed/combined waste generated at SONGS may contain the following hazardous waste constituents: oil/trichloroethane (EPA waste code F002); flammable solvents/liquids and paint sludges (D001, D006, D007, D008, F001, F002, F003, F005); corrosive liquid/solid sludge (D002); aqueous metals containing waste (D005, D010, D011); Freon filters and Freon sludges (F002); hydrazine liquids/spill residue (U133). Annual quantities of lead (D008) and mercury (D009) containing waste are identified as forty-five tons and one ton, respectively. Combined wastes include: antifreeze (State waste code 135); synthetic oil (223); waste oil (221, 222, 223); alkaline solutions (123); grease (352); paint chips/absorbent or sludge lance or steam generator chemical cleaning/zinc metal oxide (181), as well as (un)specified organic liquids, solids and sludges (132, 214, 341, 342, 343, 351, 352 and 491); paint sludge (461); tank bottoms (241); asbestos containing waste (151).

The Hazardous Waste Storage Permit is based on a Part A and B application submitted by SONGS on July 26, 2002 and January 2001 respectively. These applications request the final authorization to continue its storage of up to 62,250 gallons of mixed waste and combined waste in a total of three areas at SONGS, identified as South Yard Facility-Batch Plant (SYF-BP) Mixed Waste and Combined Waste Storage Sections A and B; Low Specific Activity Waste (LSAW) Mixed Waste and Combined Waste Storage Area; and High Specific Activity Waste (HSAW) Mixed Waste and Combined Waste Storage Area (Figure 3).

[1] Section 66261.4(a)(2) of Title 22, Cal. Code Regs excludes "source, special nuclear or by-product materials as defined by the federal Atomic Energy Act (AEA) of 1952, as amended, (42 U.S.C. section 2011 et seq.)" from regulation as a hazardous waste. Definitions of by-product, source and special nuclear materials are provided in 42 U.S.C. section 2014. Subclasses of AEA materials include: transuranic waste, high level radiological waste, spent nuclear fuel, low-level radiological waste and mill tailings waste. This section has been interpreted to apply to radioactive-only wastes, or the radioactive portions of mixed wastes.

The Part A application identifies all possible waste codes or waste types, the annual generation rate and identifies storage locations. A detailed description of the facilities, waste characterization procedures, emergency plan, training plan and closure plan are provided in the Part B application. The materials handling methods, waste analysis methods address the fourteen (14) USEPA waste codes and thirty-one (31) California waste codes processed at SONGS remain unchanged from the approval in 2000. These codes are used to track the generation, shipment and disposal of hazardous wastes in California and the nation.

The draft permit identifies storage areas and associated capacities. Mixed/combined waste may be stored for greater than one-year with DTSC approval. Each storage extension request by SONGS must identify the specific waste and container requiring extended storage. Treatment and disposal limitations for mixed/combined waste, as well as treatment standards imposed by Land Disposal Requirements (LDR), may be just cause for granting extended storage approval.

Other Agencies Having Jurisdiction Over the Project/ Types of Permits Required:

Nuclear Regulatory Commission (NRC) issued the license to operate the power plant and has sole jurisdiction over nuclear safety and security issues.

II. DISCRETIONARY APPROVAL ACTION BEING CONSIDERED BY DTSC

- ¦ Initial Permit Issuance
- ❑ Permit Renewal
- ❑ Permit Modification
- ❑ Closure Plan
- ❑ Regulations
- ❑ Remedial Action Plan
- ❑ Removal Action Work plan
- ❑ Interim Removal
- ❑ Other (Specify)

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Program/ Region Approving Project:

Standardized Permitting & Corrective Action Branch/ Berkeley

Contact Person/ Address/ Phone Number:

Walter Bahm/ 700 Heinz Avenue, Berkeley, CA 94710/ (510) 540-3957

III. ENVIRONMENTAL CONDITIONS POTENTIALLY AFFECTED

The boxes checked below identify environmental factors which were found in the following ENVIRONMENTAL SETTING/IMPACT ANALYSIS section to be potentially affected by this project, involving at least one impact that is "Potentially Significant" or "Potentially Significant Unless Mitigated".

- ❑ Aesthetics
- ❑ Agricultural Resources
- ❑ Air Quality
- ❑ Biological Resources
- ❑ Cultural Resources
- ❑ Geology And Soils
- ❑ Hazards and Hazardous Materials
- ❑ Hydrology and Water Quality
- ❑ Land Use and Planning
- ❑ Mineral Resources
- ❑ Noise
- ❑ Population and Housing
- ❑ Public Services
- ❑ Recreation
- ❑ Transportation and Traffic
- ❑ Utilities and Service Systems

IV. ENVIRONMENTAL IMPACT ANALYSIS

The following pages provide a brief description of the physical environmental conditions which exist within the area affected by the proposed project and an analysis of whether or not those conditions will be potentially impacted by the proposed project. Preparation of this section follows guidance provided in DTSC's California Environmental Quality Act Initial Study Workbook [Workbook]. A list of references used to support the following discussion and analysis are contained in Attachment A and are referenced within each section below.

Mitigation measures that are made a part of the project (e.g: permit condition) or required under a separate Mitigation Measure Monitoring or Reporting Plan that either avoid or reduce impacts to a level of insignificance are identified in the analysis within each section.

1. Aesthetics

Project activities likely to create an impact: NONE.

Description of Environmental Setting:

The SONGS facility, most notably the two domed reactor structures, is visible from the Interstate. The SYF-BP and MPHF are existing facilities located to the south at lower elevations and are not readily visible from the Interstate 5. Both the SYF-BP and MPHF were initially constructed in 1988/89. Additionally, the facility is surrounded by a small

buffer zone of vegetation and a concrete wall along the Old Pacific Coast Highway.

Analysis of Potential Impacts:

No construction, dismantling, excavation, or grading is proposed with this project that would alter existing aesthetic resources. In addition, waste storage operations are proposed to be conducted in areas not readily visible to the public. For these reasons, DTSC finds that the proposed project will not result in impacts upon this resource category.

References: 1, 2

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ❑ Less Than Significant Impact
- ¦ No Impact

2. Agricultural Resources

Project activities likely to create an impact: NONE.

Description of Environmental Setting:

The U.S. Department of the Navy (DON) owns the land where SONGS was built. On May 12, 1964 the DON issued a Grant of Easement (originally numbered as N0y(R)-67910, but later re-designated as Easement No. N6871190RP00P84). This Easement transferred possession of 83.63 acres of property located on Marine Corps Base, Camp Pendleton to Southern California Edison and to the San Diego Gas & Electric Company for the construction, operation, maintenance and use of a nuclear electric generating station for a period of 60 years ending on May 11, 2024.

Analysis of Potential Impacts:

The project is not located on farm land. Both the SYF-BP and the MPHF are existing structures surrounded by asphalt and concrete and located within the larger footprint of SONGS. Further, no construction, dismantling, excavation, or grading is proposed with this project. For these reasons, DTSC finds that the proposed project will not result in impacts upon this resource category.

References: 1, 2

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ❑ Less Than Significant Impact

¦ No Impact

3. Air Quality

Project activities likely to create an impact:

Storage of Mixed Waste and Combined Waste

Description of Environmental Setting:

The proposed project is located within the jurisdiction of the San Diego County Air Pollution Control District (SDCAPCD). The SDCAPCD is responsible for enforcing, within its jurisdiction, air quality standards established by the California Air Resources Board (CARB) and the federal Environmental Protection Agency (EPA).These air quality standards contain averaging times and threshold concentration levels for certain criteria pollutants that cannot be exceeded by proposed projects.

The SDCAPCD falls within the San Diego County Air Basin (SDCAB). Of the various criteria pollutants, the SDCARB has been designated by the CARB as being in non-attainment with California Ambient Air Quality Standards (CAAQS) for ozone, and PM10. The federal EPA has also designated the SDCAB as being in non-attainment with Federal Ambient Air Quality Standards (FAAQS) for ozone. Since ozone and PM10 have been identified as non-attainment in the SDCAB, specific standards were developed by SDCAPD to control sources of these pollutants from proposed future projects. Further, because ozone is an identified non-attainment pollutant, standards are also required for ozone precursors such as volatile organic compounds (VOCs). The SDCAPCD established such standards for projects proposed within its jurisdiction.

Air quality permits are necessary to ensure that polluting operations are controlled to the maximum degree technically and economically feasible and that such operations do not interfere with the attainment and maintenance of healthful air quality. SONGS has operating permits with the SDCAPCD for diesel generators, compressors, refrigeration and other equipment. Neither the SYF-BP nor MPHF are subject to permit requirements of the SDCAPCD.

Analysis of Potential Impacts:

Describe to what extent project activities would:

a. Conflict with or obstruct implementation of the applicable air quality plan.

   It is the SDCAPCD's Mission, in part, to "protect the public from the harmful effects of air pollution, achieve and maintain air quality standards ..." Because the proposed project does not generate criteria air pollutants, approval of this project would be consistent with the mission.

b. Violate any air quality standard or contribute substantially to an existing or projected

air quality violation.

Neither the SYF-BP nor MPHF are subject to permit requirements of the SDCAPCD because they do not generate criteria pollutants such as ozone precursors or PM10 for which the San Diego Air Basin is currently in non-attainment.

c. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

See response to Subcategory b. above.

d. Expose sensitive receptors to substantial pollutant concentrations.

See response to Subcategory a. and b. above. Also, the nearest residents are located between one and two miles from the facility, thus further limiting the potential for such receptors to be exposed to pollutant concentrations. Although there are four state beaches and parks nearby, within one half mile from the storage units, the exposure potential is insignificant due to the fact that the wastes are stored in closed containers and no criteria pollutants are generated as a result of the storage of mixed and combined wastes.

e. Create objectionable odors affecting a substantial number of people.

The proposed project does not generate odors, because wastes are stored in closed containers.

References: 3

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ¦ Less Than Significant Impact
- ❑ No Impact

4. Biological Resources

Project activities likely to create an impact: NONE.

Description of Environmental Setting:

Both the SYF-BP and the MPHF are existing structures surrounded by asphalt and concrete and located within the larger footprint of SONGS. No rare, endangered or threatened plants have been identified at the site. In addition, there are no known sensitive

invertebrate, amphibian, reptile, bird, or land mammal species at the SONGS project site due to the highly developed nature of the area. There is no identified habitat for migratory species in the operating area of the proposed project.

Analysis of Potential Impacts:

No construction, dismantling, excavation, or grading is proposed with this project. In addition, as discussed in the *Hazards & Hazardous Materials* subsection, the potential for releases of hazardous materials from the storage units are considered highly unlikely. For these reasons, DTSC finds that the proposed project will not result in impacts upon this resource category.

References: 4, 5, 6

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ❑ Less Than Significant Impact
- ¦ No Impact

5. Cultural Resources

Project activities likely to create an impact: NONE.

Description of Environmental Setting:

The SONGS site lies on a coastal plain where little historic activity has been recorded. No historic resources, including structures, traveled routes, artifacts or documents have been identified at the SONGS facility. During the construction of the SONGS site no paleontological finds, or fossil remains were noted.

Analysis of Potential Impacts:

No construction, dismantling, excavation, or grading is proposed with this project. In addition, the site is void of cultural or historical resources. For these reasons, DTSC finds that the proposed project will not result in impacts upon this resource category.

References: 1, 2

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ❑ Less Than Significant Impact
- ¦ No Impact

6. Geology and Soils

Project activities likely to create an impact:

Storage of Mixed Waste and Combined Waste

Description of Environmental Setting:

The Cristianitos fault is a major structural feature within the site area. The Cristianitos fault is exposed in the coastal bluffs approximately 1/2 mile south of Reactors Unit #2 and #3. Because of its proximity to the generating station site, extensive and detailed studies of the fault were conducted by various consultants to examine past activity. Both the SFY-BP and the MPHF have been certified to meet the Uniform Building Code 2000 seismic standards and are more than 2,000 feet from an active Holocene fault.

The SONGS site is located in the western portion of the Peninsular Ranges geomorphic province, which is characterized by northwest trending ridges and valleys separated by northwest trending lateral strike-slip faults. The western part of this province is underlain by a thick sequence of marine and non-marine sedimentary rocks. Major drainage north of the site is provided by the Santa Ana River. The Santa Margarita River drains the area to the south. The site is located at the northwest corner of the US Marine Corp Base, Camp Pendleton within two miles of the mouth of San Mateo creek. The topography consists of narrow, gently sloping coastal plain.

The plain is terminated at the beach by a rather straight line of cliffs, which have been formed over long distances by marine erosion. The coastal bluffs to the south of SONGS have retreated due to erosion and landsliding. The Reactors Units #2 and #3 are situated about 30 feet above sea level and are separated from the ocean by a narrow band of beach sand and a rock and concrete retaining wall. The mixed waste storage areas SYF-BP and MPHF area located further to the south and at a somewhat higher elevation.

Land forms of interest near the site include the San Onofre Mountains to the east and the more distant Santa Margarita Mountains to the northeast and the San Joaquin Hills to the northwest. Streams draining from the Santa Margarita Mountains feed into the San Onofre, Jardine and San Mateo Canyons north of the site.

The site area is situated on a 30- to 50-foot thick layer of Quaternary non-marine terrace deposits. Underlying the terrace deposits is the marine San Mateo Formation of Pliocene age. The San Mateo Formation is in turn underlain by a sequence of marine and non-marine sedimentary rocks of Cretaceous to Tertiary Age which overlie the plutonic basement rock of the Peninsular Ranges Batholith. Estimated thickness of the San Mateo Formation under the Mesa is 700 to 900 feet. Adjacent to the site area, to the north, San Onofre Creek has cut a channel through the terrace deposits into the San Mateo Formation and subsequently backfilled it with stream alluvium.

Terrace deposits underlying the site area are composed of silty sand, gravel, and cobbles

with occasional clayey layers. The San Mateo formation is a massive, thickly bedded arkosic sandstone with local conglomerate and siltstone lenses.

Analysis of Potential Impacts:

Describe to what extent project activities would:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42)

- Strong seismic ground shaking

- Seismic-related ground failure, including liquefaction

- Landslides

The project would not expose people or structures to potential substantial adverse effects because both the SFY-BP and the MPHF have been certified to meet the Uniform Building Code 2000 seismic. The design of MPHF follows NRC criteria as specified in NRC generic letter 91-38, and 10 CFR Part 20 and 40 CFR Part 91 for radioactive materials storage. In addition, the facilities are located more than 2,000 feet from an active Holocene fault.

b. Result in substantial soil erosion or the loss of topsoil.

Both the SYF-BP and the MPHF are existing structures surrounded by asphalt and concrete and located within the larger footprint of SONGS. No construction, dismantling, excavation, or grading is proposed with this project.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

See responses to Subcategory a. and b. above.

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

The project is not located on expansive soils as defined in Table 18-1-B of the Uniform Building Code.

c. Have soils incapable of adequately supporting the use of septic tanks or alternative

waste water disposal systems where sewers are not available for the disposal of water.

The project does not entail the new construction of septic tanks or alternative waste water disposal systems.

References: 7

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ¦ Less Than Significant Impact
- ❑ No Impact

7. Hazards and Hazardous Materials

Project activities likely to create an impact:

Storage of Mixed Waste and Combined Waste

Description of Environmental Setting:

The mixed/combined waste management facilities are located south of the City of San Clemente and northwest of the Camp Pendleton Marine base. The area is sparsely populated and is located west of the Interstate 5, Atchinson and Santa Fe Railroad, and the Old Pacific Coast Highway 101 (OPCH). The nearest residents are located approximately one to two miles at San Onofre State Beach, the military and dependent housing at Camp Pendleton. Single family residents of the City of San Clemente are located approximately four miles of the proposed project.

The Old Pacific Highway 101 which passes just outside of SONGS is no longer an active highway. Traffic on this road is quite limited. The San Onofre State Beach is at the end of the OPCH to the south of SONGS. OPCH is reached via the Basilone Road exit off Interstate 5 and dead ends at the State Beach=s entrance less than one half mile from SONGS. The San Onofre State Beach features three miles of campsites situated on the former stretch of coastal highway. There are four state recreational areas and a wetland preserve within one half mile from the storage units: San Onofre Bluffs Campground, the San Mateo Campground, the Trestle Beach, the San Onofre Surf Beach, and the San Mateo Wetlands Natural Preserve.

Hazardous and mixed/combined waste is generated at several on-site locations such as machine shops, paint shops, lube oil lockers, warehouse and the Unit 1 decommissioning project. At these locations, the waste is tested and characterized for the hazardous chemical constituents and the radioactive isotopes. If the waste is determined to be a “hazardous waste”, it is placed in sealed containers and moved to accumulation areas, where it may be stored for no more than 90 days before it is required to be shipped to an

off-site disposal or treatment facility. If the waste is a mixed/combined waste, it is placed in sealed containers and moved to either the SYF-BP or MPHF, where it may be stored up to one year, with some exceptions for longer periods, before being shipped off-site for disposal or treatment.

The NRC requires Southern California Edison (and other licensees) to ensure that members of the public are not exposed to more than 1 milliRem/hour and that the maximum annual dose to a member of the public from operation of a facility is limited to no more than 100 milliRem/year in Title 10 of the Code of Federal Regulations, Part 20. Title 40 of the Code of Federal Regulations Part 190 restricts the allowable level of radioactivity at the perimeter of SONGS to 25 milliRem/year. The natural background radiation level at SONGS typically ranges between 50 – 100 milliRem/year. A maximum reading of 0.07 milliRem/year was taken in calendar year 2002 at the perimeter of SONGS near the SYF-BP and MPHF.

Staff and management for the mixed/combined waste storage facilities at SONGS are given annual training classes on hazardous waste and radioactive materials handling and emergency procedures, and the use of personnel protective equipment. The RCRA Part B application provides the detailed training plan and knowledge covered; and, the emergency plan with egress routes and emergency equipment.

Analysis of Potential Impacts:

Describe to what extent project activities would:

a. Create a significant hazard to the public or the environment throughout the routine transport, use or disposal of hazardous materials.

   Based on an examination of the Operations Plan, DTSC found that under normal operating conditions, no discharges or emissions of mixed waste would be expected. This is the case because all mixed/combined waste is packed at the point of generation and brought to the SYF-BP or MPHF in sealed containers. There are no emission sources such as fume hoods or stacks. Access to the facility is restricted, thus preventing the possibility of public exposure.

   DTSC did not require preparation of a Health Risk Assessment (HRA) as part of this permit determination principally because no potential pathways appear to exist that would otherwise lead to human and ecological exposure to mixed or combined wastes.

   Risk assessments use several conservative assumptions, one of which is how long a person might be exposed to the chemicals of concern. Excess cancer risk associated with exposure to chemically hazardous constituents of the mixed/combined waste stored at SONGS storage units was not specifically evaluated all mixed waste and combined waste are stored in sealed containers, and there are no discharge points at the SYF-BP or MPHF. To evaluate excess cancer risk, an individual is assumed to be exposed to a particular chemical for a

prolonged period of time (usually 70 years). In the case of the SYF-BP or MPHF, this assumption would not apply, since most of the waste is sent off-site for treatment or disposal and therefore, additional cancer risk from long-term exposure is not applicable.

Additionally, no air emissions are expected to occur during normal storage and handling operations at the SYF-BP and MPHF because all waste brought in to the storage areas would be in sealed containers.

There are also several circumstances that minimize accident potential in the identified scenarios. They are:

- no flammable gas or highly flammable liquid existing inside or adjacent to the SYF-BP or MPHF;
- except for vehicle fuel there would be no flammable gas or liquid transported;
- the SYF-BP or MPHF has adequate fire protection system, including sprinklers, audible alarms, and automatic notification to the federal fire department
- mixed waste will be stored and transported in sealed containers; and
- periodic inspections by SYF-BP or MPHF operators and the federal fire department ensure no extraneous or combustible materials are in the SYF-BP or MPHF.

Based upon the available information, DTSC concluded that the proposed project would not pose a significant risk to the public health or the environment.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

In an updated Fire Hazard Analysis Report (1993), SONGS demonstrated conformance with NRC safety standards. This analysis assumed the storage of a total of 55,000 gallons of flammable or combustible liquids. Of this amount, 50% was assumed to be solvents with a heating value of 87,450 BTU/gallon and the balance was comprised of waste machine lubricating oils with a heating value of 132,800 BTU/gallon. This 1993 analysis was used for establishing the maximum number of containers of mixed/combined waste that can be stored in the SYF-BP.

SONGS operates its own fire department with eighteen full-time firefighters and two support staff. The fire department operates three shifts, with a 24 hour readiness schedule. Firefighting vehicles include:

- E-1 Hush 1500 Gpm
- Mack Telesquirt 1250 Gpm
- International Ambulance
- International Brush Truck 250 Gpm
- Command Vehicle

- Two Seismic Tractors 500 Gpm

The on-site fire department response time averages three (3) minutes. Mutual Aide Agreements are established with the Camp Pendleton Fire Department (Federal Fire Department).

Potential upset conditions include not only events associated with natural disasters and associated unforeseen emergencies such as fire, tsunami, or earthquake, but those events more commonly called accidents. Accidents include those caused by human error, equipment malfunction or failure and sabotage. The unexpected release of mixed waste and/or combined waste is of principal concern here. Reviews of potential upsets and hazards were conducted by SONGS and DTSC. The results are summarized below.

The mixed/combined waste storage structures, the SYF-BP and MPHF, are locked and gated. Access is tightly controlled and the SONGS facility is under 24-hour armed guard. Both structures have secondary containment systems, fire sprinkler systems and alarms.

The SYF-BP has a separate locked fence and only selected operators have access. All mixed/combined waste at the SYF-BP are sealed in containers and labeled. As SONGS was excavated into the coastal mesa, the elevation of the SYF-BP lies 30 feet below the Interstate 5.

Fire extinguishers are posted at several locations in the SYF-BP. Mixed/combined waste drums are not stacked more than two containers high on pallets. All waste must remain stored in sealed containers.

The MPHF features restricted access with controlled entry and personnel monitoring stations to measure radiation levels upon entry and exit. The structure provides a high level of shielding by virtue of one-foot or thicker concrete and steel walls. The building has a fire suppression system and smoke alarm. Materials are stored in two bays, one for High Specific Activity Waste (HSAW) and the other for Low Specific Activity Waste (LSAW). The floors have collection and run-off trenches which lead to a 40,500 gallon blind sump with leak detection and level alarms in the blind sump.

The MPHF is designed per the Seismic Category III criteria and as a Quality Class IV structure. The design of the facility follows NRC criteria for "Storage of Low Level Radioactive Waste at Power Reactor Sites". The MPHF is located such that it will not hamper any normal or emergency vehicle traffic. The surrounding areas to the MPHF are graded such that surface runoff will flow to existing storm drain systems and will be monitored via the NPDES permit.

The MPHF heating ventilation and air-conditioning (HVAC) system is designed with only one release point. This release point has a radiation monitor which is continuously monitors for radioactivity. Baseline normal operation involves no

detection as all materials stored are in sealed containers with no processing occurring inside the MPHF. In the event of detected radiation, or upon a high radiation alarm, or failure of the radiation monitor, the operator is alerted and the building's isolation damper is closed to prevent the release of airborne radioactive contaminants into the atmosphere. In addition, the quantity of mixed waste stored in the MPHF is about one third of what may be stored in the SYF-BP.

The MPHF has been designed such that the dose rate to the general public per 40 Code of Federal Regulations part 190 criteria will be less than 25 milliRem/year.

Based on the design standard of the MPHF and the fact that the building is only used to store packaged waste or equipment, an accidental release of waste materials in the MPHF is not expected to result in significant impacts. In the event of a catastrophic incident, the SYF-BP, would provide secondary containment for liquids. However, it is not designed to prevent the release of vapors, particulates or aerosols. Thus, the principal risk of upset is the risk of exposure to waste constituents volatilized from a spill or fire in the SYP-BP.

A review of all hazardous waste and mixed/combined waste shipped from SONGS in the past five years suggests that most waste is shipped within 90-days of generation. Of the total waste, less than 24% is mixed or combined waste. A historical review of wastes managed at the storage facilities suggests that less than 50% involve liquids. Solvent mixed/combined wastes at SONGS typically contain 10% or less by weight of actual chemical constituents. The two most toxic compounds in the mixed or combined waste at SONGS were determined to be trichloroethylene (TCE), a solvent, and hydrazine used as a corrosion inhibitor. Other wastes were either at low concentrations, small quantities, or low toxicity.

Typically, 35% aqueous hydrazine is used daily for water treatment. The waste residuals typically contain hydrazine at concentrations of 12%, or less. SONGS's procedures in packaging hydrazine containing waste typically involve the addition of a hypochlorite solution, such as bleach (3 to 6% sodium hypochlorite). These precautions reduce the volatility and concentration of hydrazine and further limit potential exposure due to an accidental release. In the last five years no more than 60 pounds per year of mixed waste containing hydrazine was generated and disposed of by shipment to a permitted off-site disposal facility.

The vapor pressure of pure hydrazine at standard temperature (25^0C) and pressure (1 atm) is 14.4 mmHg. The partial pressure of 35% hydrazine used for water treatment at SONGS at standard temperature and pressure is below 1 mm Hg. The partial pressure of 12% hydrazine typically found in the waste residue at SONGS will be even lower.

TCE is used widely as a metal degreaser. It is valued for its cleaning properties, low flammability, and lack of a measurable flashpoint due to its lack of ignitability. Bulk quantities of solvent might typically be managed at SONGS solely as a hazardous waste, not as a mixed waste and, thus, would not be subject to management under the permit. However, small amounts of TCE might be

contaminated with radionuclides and, when this occurs, would be subject to management under the permit. In accumulating mixed/combined waste, quantities of no more than 120 drums per year are anticipated. Typical concentrations of TCE waste generated are about 10% solution.

In recognition of the potential for explosions, fires, and releases of toxic chemicals into the environment, the State Legislature established requirements for hazardous materials management programs in division 20, chapter 6.95, article 2 (commencing with section 25531) of the California Health and Safety Code. The purpose of such programs is to prevent accidental releases of toxic air contaminants and hazardous materials from any process in quantities and concentrations that could produce a significant likelihood that persons exposed may suffer acute health effects resulting in significant injury or death.

The U. S. Environmental Protection Agency (U. S. EPA) and the California Office of Emergency Services, in consultation with the Office of Environmental Health Hazard Assessment, have determined the quantities and concentrations of toxic air contaminants and hazardous materials that could present such a risk. These substances are listed in California Code of Regulations, title 19, section 2770. The listed substances do not include hydrazine or TCE in the quantities or concentrations that would be managed by SONGS under the permit. Hydrazine is listed by the California Office of Emergency Services, but only when 1000 pounds or more are present in a process in concentrations that create partial pressures equal to or greater than 10 millimeters mercury (mm Hg) at standard temperature and pressure. The U. S. EPA also lists hydrazine at these same concentrations, but only when 15,000 pounds or more are present. Neither the U. S. EPA nor the California Office of Emergency Services lists TCE.

Based on the U. S. EPA and the California Office of Emergency Services determinations, DTSC concludes that the accidental release of the small amounts and low concentrations of hydrazine or TCE from processes covered by the permit would not produce a significant likelihood that persons exposed may suffer acute health effects resulting in significant injury or death, even if unmitigated.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.

The proposed project is not located within one-quarter mile of an existing or proposed school. See also response to Subcategory a. above.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to public or the environment.

The project is not located on such a list.

e. Impair implementation of, or physically interfere with, an adopted emergency

response plan or emergency evacuation plan.

As previously discussed, SONGS operates its own fire department with eighteen full-time firefighters and two support staff. The fire department operates three shifts, with a 24 hour readiness schedule. The on-site fire department response time averages three (3) minutes. Mutual Aide Agreements are established with the Camp Pendleton Fire Department (Federal Fire Department).

References: 8, 9, 10, 11

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ¦ Less Than Significant Impact
- ❑ No Impact

8. Hydrology and Water Quality

Project activities likely to create an impact:

Storage of Mixed/Combined Waste

Description of Environmental Setting:

The Water Quality Basin Plan was approved by the San Diego Regional Water Quality Control Board (RWQCB) in September 1994 and received final approval from the California Office of Administrative Law (OAL) in April 1995.

The nearest surface water body is the Pacific Ocean. The storage facilities are within 2,000 feet of the Pacific Ocean. Ocean discharges, including storm water discharges, cooling water and sanitary waste, are via three deep water outfall points operated under National Pollutant Discharge Elimination System (NPDES) permits issued by the RWQCB in San Diego. Similarly, SONGS operates waste water treatment works which are permitted and monitored by the RWQCB.

No active groundwater extraction occurs at the site. Limited amounts of groundwater are used for agricultural purposes east of SONGS.

Analysis of Potential Impacts:

Describe to what extent project activities would:

a. Violate any water quality standards or waste discharge requirements.

Both the SYF-BP and the MPHF have more than the mandatory (100% of the largest container or 10% of the aggregate containers) secondary containment and

protection from rainfall, or run-on. Surface water run-off is collected and subject to NPDES monitoring and controlled discharge permits. The SYF-BP has two 800-gallons and one 400-gallons blind sumps which together with berms of not less than 6 inches provide secondary containment.

The total secondary containment capacity is more than 60,000 gallons. Access to the SYF-BP is controlled and the site is monitored several times in the day. The MPHF encompasses 10,810 square feet. The floor has collection and run-off trenches which lead to a trench or blind sump system with leak detection and alarms. The floor of the HSAW Bay is 10 feet below the LSAW Bay. The LSAW Bay and HSAW Bay drain to a common blind sump in the HSAW Bay. Secondary containment capacity for both areas is greater than 40,500 gallons and well in excess of the secondary containment requirements.

The RWQCB has determined that compliance with identified NPDES requirements will be sufficient to prevent significant adverse impacts to ground water or surface water during the operation of the facilities. DTSC finds that spill prevention and containment is adequate to assure no significant impacts.

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficient in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

See response to Subcategory a. above.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site.

See response to Subcategory a. above

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site.

See response to Subcategory a. above

e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

See response to Subcategory a. above

f. Otherwise substantially degrade water quality.

See response to Subcategory a. above

g. Place within a 100-flood hazard area structures which would impede or redirect flood flows.

A Federal Insurance Administration (FIA) rate map is not available for the facility. A thorough evaluation of the flooding potential was performed and reported in the Final Safety Analysis Report (FSAR) which is a continually updated document submitted to the Nuclear Regulatory Commission (NRC) as part of a nuclear power plant operation license. A Design Basis Probable Maximum Flood (PMF) analysis was performed for both San Onofre Creek and the foothill drainage area east of site. The PMF analysis results conclude that there is no potential for flooding at the site from San Onofre Creek. However, the site could be subject to flooding during the occurrence of the design basis PMF. SONGS built a source diversion structure which routes runoff from the foot hill drainage area into the San Onofre Creek Basin.

Examination of the San Onofre and San Clemente 7.5 Minute Quadrangle topographic maps support the conclusion that a low stream flooding potential exists at the facility location. Major streams are San Onofre Creek (one mile to the northwest), San Mateo Creek (two miles to the northwest) and a foothill drainage area stretching approximately one mile to the east of the site. The close proximity of sea cliffs down-slope of the hazardous waste storage areas will help mitigate the potential for flooding due to the high drainage potential of the sea cliff area.

The diversion structure was documented in “Probably Maximum Flood Berm Drawings and Ion Exchange Resin Analysis” dated April 9, 2001. The U.S. Army Corps of Engineers, Los Angeles District, concluded that the diversion structure was designed and constructed to mitigate the flooding potential in this area to the PMF level. This indicates that the 100-year flood plain from this source does not impact the hazardous waste storage areas.

h. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

See response to Subcategory g. above

i. Inundation by sieche, tsunami or mudflow.

See response to Subcategory a. above

References: 12, 13

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated

¦ Less Than Significant Impact
❑ No Impact

9. Land Use and Planning

Project activities likely to create an impact: NONE.

Description of Environmental Setting:

The U.S. Department of the Navy (DON) owns the land where SONGS was built. On May 12, 1964 the DON issued a Grant of Easement (originally numbered as N0y(R)-67910, but later re-designated as Easement No. N6871190RP00P84). This Easement transferred possession of 83.63 acres of property located on Marine Corps Base, Camp Pendleton to Southern California Edison and to the San Diego Gas & Electric Company for the construction, operation, maintenance and use of a nuclear electric generating station for a period of 60 years ending on May 11, 2024.

Analysis of Potential Impacts:

The proposed project is located on federally owned land and is not subject to local land use permits. In addition, the proposed project is consistent with the land lease contract with the U.S. Department of Defense. For these reasons, DTSC finds that the proposed project will not result in impacts upon this resource category.

References: 1, 2

Findings of Significance:

❑ Potentially Significant Impact
❑ Potentially Significant Unless Mitigated
❑ Less Than Significant Impact
¦ No Impact

10. Mineral Resources

Project activities likely to create an impact: NONE.

Description of Environmental Setting:

There are no known mineral resources at the project site.

Analysis of Potential Impacts:

There are no known mineral resources at the proposed project site. Further, no construction, dismantling, excavation, or grading is proposed with this project. For these reasons, DTSC finds that the proposed project will not result in impacts upon this resource

category.

References: 1, 2

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ❑ Less Than Significant Impact
- ¦ No Impact

11. Noise

Project activities likely to create an impact: NONE.

Description of Environmental Setting:

The operations at the SYF-BP and the MPHF involve the use of vehicles such as forklifts or trucks. Mixed waste and combined waste may be moved into storage as much as a few times per week, while shipments off-site generally do not exceed two or three per month. Concurrent sources of noise include traffic on Interstate 5 and the crashing surf.

Analysis of Potential Impacts:

Noise associated with project activities are similar in nature to those currently existing at the larger SONGS facility. These noise sources are confined within the property boundaries of SONGS. For these reasons, DTSC finds that the proposed project will not result in impacts upon this resource category.

References: 1, 2

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ❑ Less Than Significant Impact
- ¦ No Impact

12. Population and Housing

Project activities likely to create an impact: NONE.

Description of Environmental Setting:

SONGS employs approximately 1,950 workers. Although there maybe individuals on site for a period of 24 hours a day, there is no onsite housing units

Analysis of Potential Impacts:

The proposed project will not require the hiring of additional employees beyond those already assigned to the project. The project also will not entail the construction of any new off-site or on-site housing units. For these reasons, DTSC finds that the proposed project will not result in impacts upon this resource category.

References: 1, 2

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ❑ Less Than Significant Impact
- ¦ No Impact

13. Public Services

Project activities likely to create an impact: NONE.

Description of Environmental Setting:

SONGS has entered into mutual aid agreement with local and county agencies, as well as with Camp Pendleton. The NRC requires a full time armed security force. Security zones and control points are most significant in and around the nuclear reactors themselves. Similar redundancies are featured in the on-site emergency and fire response systems.

Analysis of Potential Impacts:

The waste storage areas to be permitted are existing activities and do not require an increase over existing on-site resources. For these reasons, DTSC finds that the proposed project will not result in impacts upon this resource category.

References: 1, 2,

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ❑ Less Than Significant Impact
- ¦ No Impact

14. Recreation

Project activities likely to create an impact: NONE.

Description of Environmental Setting:

There are no public recreational facilities located at the proposed project site. There are four state recreational areas and a wetland preserve within one half mile from the storage units: San Onofre Bluffs Campground, the San Mateo Campground, the Trestle Beach, the San Onofre Surf Beach, and the San Mateo Wetlands Natural Preserve.

Analysis of Potential Impacts:

The waste storage areas to be permitted are existing activities and do not generate the need for an increase for on and off-site recreational facilities. For these reasons, DTSC finds that the proposed project will not result in impacts upon this resource category.

References: 1, 2

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ❑ Less Than Significant Impact
- ¦ No Impact

15. Transportation and Traffic

Project activities likely to create an impact:

Off-site transport of containerized waste via truck to a licensed, low-level radioactive waste or mixed-waste repository.

Description of Environmental Setting:

SONGS is located along the southwestern California Pacific Coast, west of Interstate 5. Access to the site is along the Basilone Road Exit, south of the City of San Clemente. A traffic study by Wilbur Smith Associates, dated December 1993 found the traffic volume on the eight lane Interstate, passing SONGS to be Ahigh@, with 7,200 vehicles passing per hour. Typical Interstate traffic in California ranges from 700 to 1,000 vehicles per hour per lane. SONGS employs as many as 1950 workers, working in three shifts. Of these employees, as many as 15 work at the SYF-BP and the MPHF. Traffic in and out of the facility may involve as many as 600 vehicles per day.

An annual average of 30 shipments or less of mixed waste and combined waste are sent to off-site treatment of disposal from SONGS. The shipments are made in either bulk drums and/or boxes using a van or flatbed truck. Bulk liquid shipments are made in 100-120 barrel carbon steel, stainless steel, or KYNAR lined vacuum trucks. Generally, this

equates to no more than two or three shipments per month.

Analysis of Potential Impacts:

Describe to what extent project activities would:

a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).

   The proposed project will not result in an increase over the annual average of 30 shipments or less of mixed waste and combined waste that are sent to off-site treatment or disposal from the site.

b. Exceed, either individually or cumulatively, a level of service standard established by the country congestion management agency for designated roads or highway.

   See response to Subcategory a. above.

c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

   See response to Subcategory a. above.

d. Result in inadequate emergency access.

   See response to Subcategory a. above.

e. Result in inadequate parking capacity.

   The proposed project will not entail an increase in the existing employee base, thus not impacting existing on and off-site parking capacity.

f. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

   This project doe not involve the use of public transportation nor increase existing employee commute habits that would otherwise require an analysis of transportation alternatives.

References: 1, 2, 14

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated

¦ Less Than Significant Impact
❑ No Impact

16. Utilities and Service Systems

Project activities likely to create an impact: NONE.

Description of Environmental Setting:

Both the SYF-BP and the MPHF are existing structures and located within the larger footprint of SONGS. These facilities utilize existing utilities and services at SONGS.

Analysis of Potential Impacts:

There are no project activities that would generate wastewater or solid waste or those that would require water sources beyond those already in place at the site. For these reasons, DTSC finds that the proposed project will not have an impact upon this resource category.

References: 1, 2

Findings of Significance:

❑ Potentially Significant Impact
❑ Potentially Significant Unless Mitigated
❑ Less Than Significant Impact
¦ No Impact

17. Mandatory Findings of Significance

Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Explanation: Both the SYF-BP and the MPHF are existing structures surrounded by asphalt and concrete and located within the larger footprint of SONGS. No construction, dismantling, excavation, or grading is proposed with this project. Further, no rare, endangered or threatened plants have been identified at the site. In addition, there are no known sensitive invertebrate, amphibian, reptile, bird, or land mammal species at the SONGS project site due to the highly developed nature of the area. There is no identified habitat for migratory species in the operating area of the proposed project.

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ❑ Less Than Significant Impact
- ¦ No Impact

Does the project have impacts that are individually limited but cumulatively considerable?

Explanation: Potential impacts from project activities have been identified as affecting Air Resources and Hazardous Materials. Such impacts have been shown to be individually less-than-significant. Consequently, project activities would not have the ability to create a pathway to affect air, water, habitats, natural resources or any other environmental resource.

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ❑ Less Than Significant Impact
- ¦ No Impact

Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or in-directly?

Explanation: When considering this Initial Study and the adminstrative record, there is no evidence before DTSC that the proposed project will have any potential to cause substantial adverse effects on human beings, either directly or in-directly.

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ❑ Less Than Significant Impact
- ¦ No Impact

V. DETERMINATION OF APPROPRIATE ENVIRONMENTAL DOCUMENT

On the basis of this Initial Study:

¦ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

❑ I find that although the proposed project COULD HAVE a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

❑ I find that the proposed project MAY HAVE a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

_____

Wei-Wei Chui, Section Chief 510-540-3975 Date
Standardized Permitting and Corrective Action Branch
Department of Toxic Substances Control

ATTACHMENT A

INITIAL STUDY
REFERENCE LIST
For
SOUTHERN CALIFORNIA EDISON - SAN ONOFRE NUCLEAR POWER GENERATING STATION (SONGS)

1. Part A Application and attachments, July 26, 2002

2. Part B Hazardous Waste Facility Permit Application, January 18, 2001

3. 1998 Annual Report Air in San Diego County, by San Diego County Air Quality Management District

4. Sierra Club, California Native Plant Society-San Diego Chapter

5. Letter from Brian Metz, Registered Environmental Assessor and Supervisor of Environmental Services at SONGS, dated August 15, 2000.

6. California Department of Fish and Game, Natural Diversity Data Base, CD-Government Version, July 5, 2000.

7. U.S Geological Survey

8. Hazard Analysis Report (1993)

9. NRC Annual Assessment, May 29, 2001.

10. RCRA Facility Assessment, dated August 30, 2002.

11. NPDES Permit, Order No. 99-47 and 99-48

12. San Diego Basin Plan, 1994/5

13. Verbal communication with Brian Metz, Registered Environmental Assessor, and supervisor in the Environmental Services Unit at SONGS.

14. Traffic Study for Southern California Edison, San Onofre Nuclear Generating Station, by Wilbur Smith Associates, Dated December 1993.

Figure 1 Site Aerial Photograph

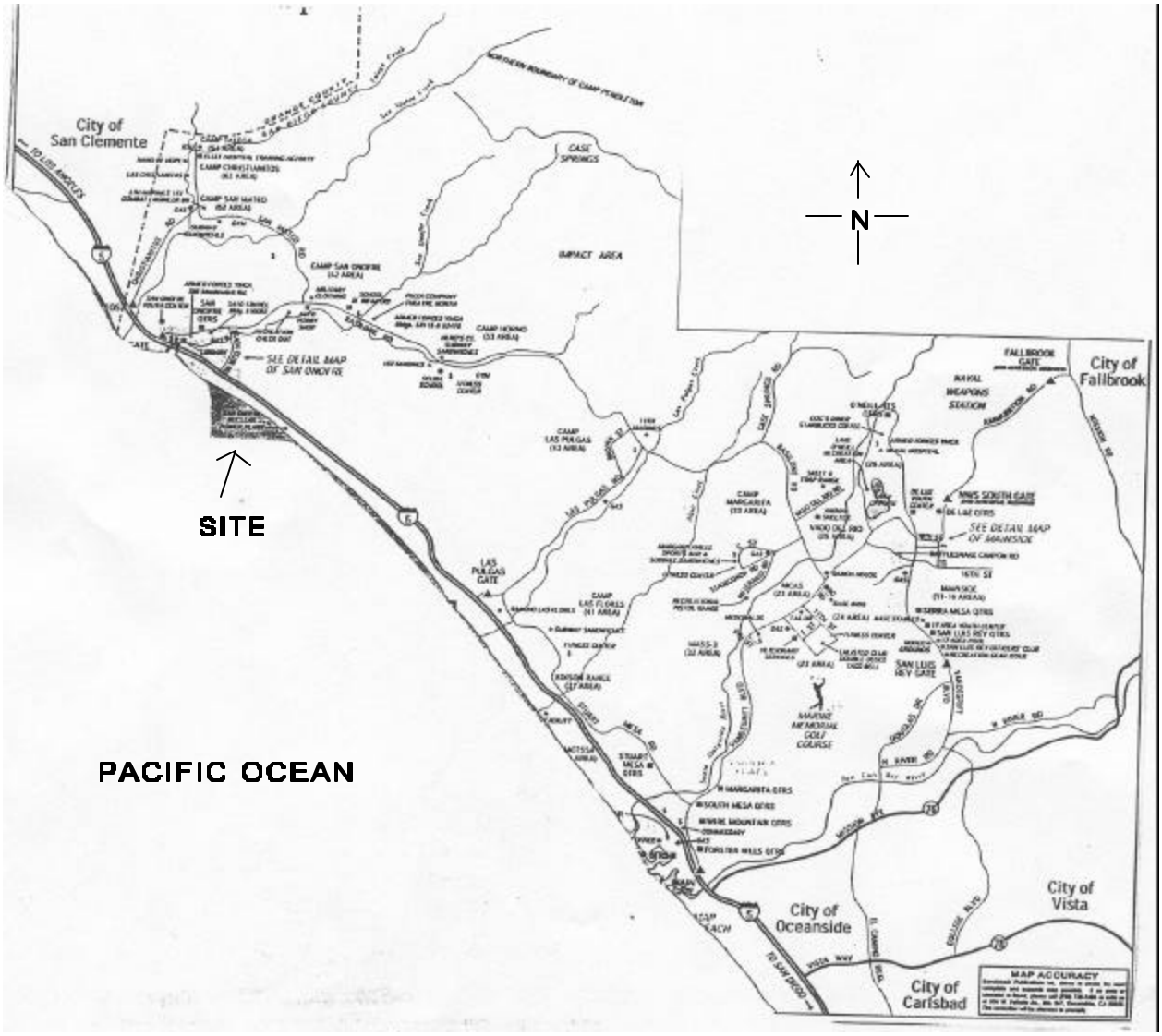

Figure 2 Site Location Map

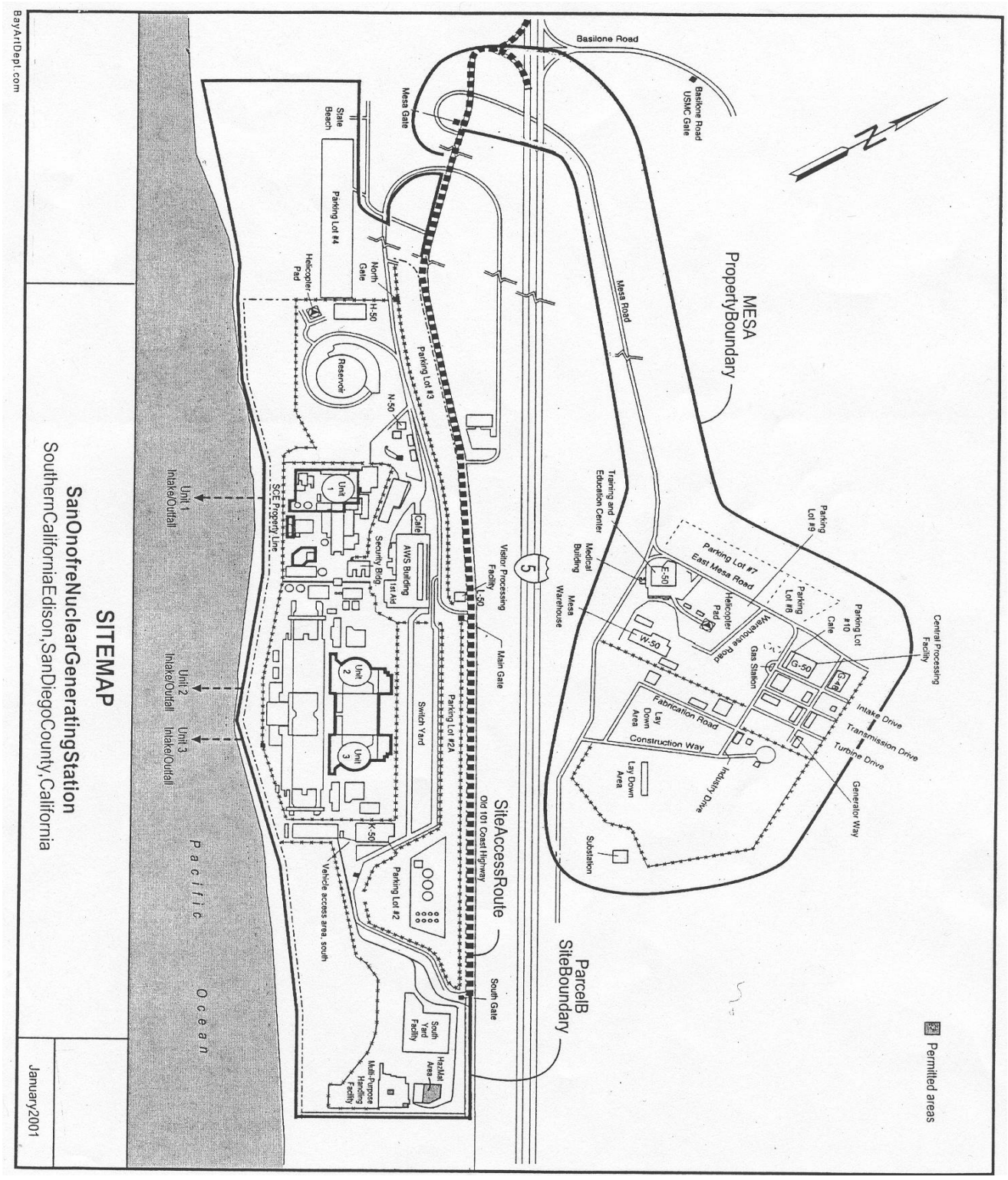

Figure 3 Site Layout Map